

- (1) E. MAMELI—G. POLLACCI, Sull'assimilazione diretta dell'azoto atmosferico libero nei vegetali (Atti dell'Istituto Botanico di Pavia, Ser. II, XIV, 159-257, Con 3 tavole.) 1911.
- (2) E. MAMELI—G. POLLACCI, Ancora sull'assimilazione diretta dell'azoto atmosferico libero nei vegetali (Atti dell'Istituto Botan. di Pavia, XVI, 197-203).
- (3) SCHRAMM, J. R., Grass-green algae and elementary nitrogen (Science, XXXIX, 260) 1914.
- (4) MOORE, B., T. A. WEBSTER., Studies of photosynthesis in freshwater algae (Roy. Soc. London Proc. Ser. B. 91 (1920), N. B. 638, pp. 201-215).
- (5) MOORE, B., WHITLEY E., WEBSTER, T. A., Studies of photosynthesis in marine algae (idem, Ser. B. 92, (1921) N. B. 642, pp. 51-60).
- (6) WANN, F. B., The fixation of free nitrogen by green plants (Amer. Journ. of Bot. VIII, 1), 1921.
- (7) FRANK, B., Ueber die Stickstoffbindenden Algen des Ackerbodens. (Chem. Zeitung, 1888, n. 81).
Ueber den experimentelle Nachweis der Assimilation freien Stickstoffs durch erdbodenbewohnende Algen (Ber. d. B. Bot. Ges. VII, 34) 1889.
- (8) GAUTIER ET DROUIN, Recherches sur la fixation de l'azote par le sol et les vegetaux. (Comptes rendus des séances de l'Acad. d. France, CVI, 754, 863, 944, etc.) 1888.
- (9) LIPMAN, C. B., TAYLOR, J. K., Proof of the power of the wheat plant to fix atmospheric nitrogen (Science, LVI, N. 1456, Nov., 1922).

ESTACIÓN EXPERIMENTAL AGRONÓMICA,
CUBA

SHORTER NOTES

NOTES ON A NEW ROSE-FLOWERED ROBINIA FROM SOUTH CAROLINA

P. O. SCHALLERT

The distribution of the rose-flowered Robinias in the eastern United States seems to be centered in the extreme western part of South Carolina and in the adjoining counties of North Carolina. The greatest multiplication of individual plants seems to occur in western North Carolina, but the greatest development of species seems to have taken place along the western edge of South Carolina.

W. W. Ashe has recently called to my attention a plant which he has in cultivation, the stock of which came from Oconee County, South Carolina, and which seems to be so different

from any other form which has been described or which he has in cultivation, as to deserve consideration as a distinct species. On account of its exceptionally long racemes, showy flowers, and relatively long-flowering season it will undoubtedly prove to be a plant of horticultural value, ranking with *R. viscosa* and *R. longiloba* as an ornamental shrub and tending on account of its suckers to form dense clumps. The description of this proposed species is as follows:

✓ **Robinia Ashei**, sp. nov. A shrub 1-3 m. high, with smooth brown bark on the stem, which as well as the more vigorous branchlets is armed with nearly terete slender stipular spines 1-1.3 cm. long. Shoot of season, petiole, rachis, peduncle and calyx covered with stiff gland-tipped, but not viscid, hairs or weak bristles of unequal length, mixed with short grayish non-glandular pubescence. Leaves 1.2-2 dm. long, formed of 13 to 17 oblong-ovate or elliptic leaflets, 3-4.6 cm. long and 1.2-2.3 cm. wide, appressed silky canescent as they unfold, at length nearly glabrous above, and sparingly appressed pubescent beneath except on midrib and petiolule which are permanently pubescent. Racemes .9-1.9 dm. long, as long as the leaves or shorter; 18-32-flowered; flowers 22-24 mm. long, bright rose-purple with keel partly white; calyx tubular, 12-15 mm. long, fully one half as long as the flower, the long acuminate glandular-hirsute divisions 8-10 mm. long. This plant is not known to set fruit.

Oconee County, South Carolina, W. W. Ashe. This plant resembles *R. longiloba* Ashe (Journ. El. Mitch. Sci. Soc. 37: 175) in the size and color of its flowers and in its gland-tipped, non-viscid pubescence, but is well separated by having longer racemes, much longer calyx lobes and its greater pubescence.

For this species I propose the name of **Robinia Ashei** in honor of its discoverer, W. W. Ashe of Washington, D. C., who has for several years been cultivating the dwarf locusts.

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A COMMON NAME FOR PHACELIA PURSHII

In the September-October, 1923, number of *TORREYA*, I was interested in Professor Hansen's note on *Phacelia Purshii*, since I had never observed the tendency he describes, although the plant was familiar to me in my youth. I do not question the writer's observations at all, but when he states that the plant has no recognized common name, I want to tell him about one that we used in western Ohio, in the valley of the Great Miami River. We called it "Miami Mist," and I learned the name from the late A. H. Vance, naturalist and lover of wild flowers, of Troy, Ohio. And this common name may be found in *A Class-Book of Botany*, by Alphonso Wood, 1853 ed., p. 437.

G. CLYDE FISHER

A NEW SAXIFRAGE FROM OREGON

✓ *Saxifraga Gormanii*, sp. nov.

Perennial; rootstock horizontal, short; scape erect, densely covered with glandular, reddish pubescence; 2-3 dm. high; the rather broad panicle $\frac{1}{2}$ - $\frac{1}{4}$ as long. Leaves basal, deltoid-ovate or elliptical, or rarely nearly orbicular, the larger ones 3-4 cm. long, sometimes slightly cordate at base, mostly short-petioled, upper side glabrous, the lower with sparse, brown pubescence, the margin crenate or only slightly wavy, more or less ciliate or puberulent. Branches of the panicle terminated by short, mostly few-flowered cymes; bracts lanceolate, 5-10 mm. long, or the upper shorter; pedicels 5-10 mm. long. Calyx glabrous, with very short tube; lobes ovate or roundish, reflexed, about 2 mm. long. Petals on short claws, elliptical, white, about 3 mm. long. Stamens a little shorter than the corolla; the filaments club-shaped but acute at the upper end, white; the anthers about as long as broad, orange-yellow. Ovaries 2, free from the calyx and from each other, greenish with a yellowish disk at base, the stigma nearly sessile at first. The ripe carpels 3-4 mm. long, conical-ovate, the upper part curved outward; the style about 0.5 mm. long. Seeds 0.5 mm. long, ovate or oblong, obtuse or acutish at the ends, brownish.—Collected by *Mr. M. W. Gorman* on moist rocky slopes, Elk Rock, Multnomah County, Oregon, June 2, 1917, No. 4081.—This species is much

like *S. fragosa* in appearance, but the two plants are not very closely related. *S. fragosa* Sksd. differs in having a more adnate calyx with spreading, narrower lobes; prominently 3-nerved, sessile petals; subulate, shorter filaments; and shorter follicles that have shorter, yet more strongly curved beaks.

WILHELM SUKSDORF

BOOK REVIEW

THE LARGER BRITISH FUNGI*

"The object of this Handbook," says Mr. Rendle in the preface, "is to supply an introduction to the study of the larger British fungi. When considering the preparation of a new edition of the 'Guide to Sowerby's Models of British Fungi,' by the late W. G. Smith, which had served also as an introduction to the systematic study of the larger fungi, it was thought that its value might be increased by including all the British genera of Basidiomycetes. This has now been done, and additional figures have been added from Smith's 'Synopsis of British Basidiomycetes.' The Introduction has been greatly extended, the descriptions generally have been revised and enlarged, and additional matter of economic and biological interest has been included. Mr. Ramsbottom has, in fact, rewritten the book, while retaining the form and arrangement of the original 'Guide'."

The volume contains 222 pages of text and 141 figures. The introduction treats of fungi in general and their main groups; fairy rings; luminosity; mycorrhiza; changes in color when sporophores are cut or broken; poisonous and edible fungi; fungi as food; and the ecology of the fungi. Under Basidiomycetes, the author treats at some length not only their classification but also their cytology, morphology, and development. In connection with *Amanita phalloides*, the deadly poisonous fungi are discussed, with symptoms and treatment; while under *Psalliota campestris* the growing of mushrooms is described. In the same way, much interesting and valuable information is distributed throughout the volume in connection with suggestive species.

* Ramsbottom, J. A Handbook of the Larger British Fungi, pp. i-iv, 1-222. British Museum, London, 1923. Price 7/6.